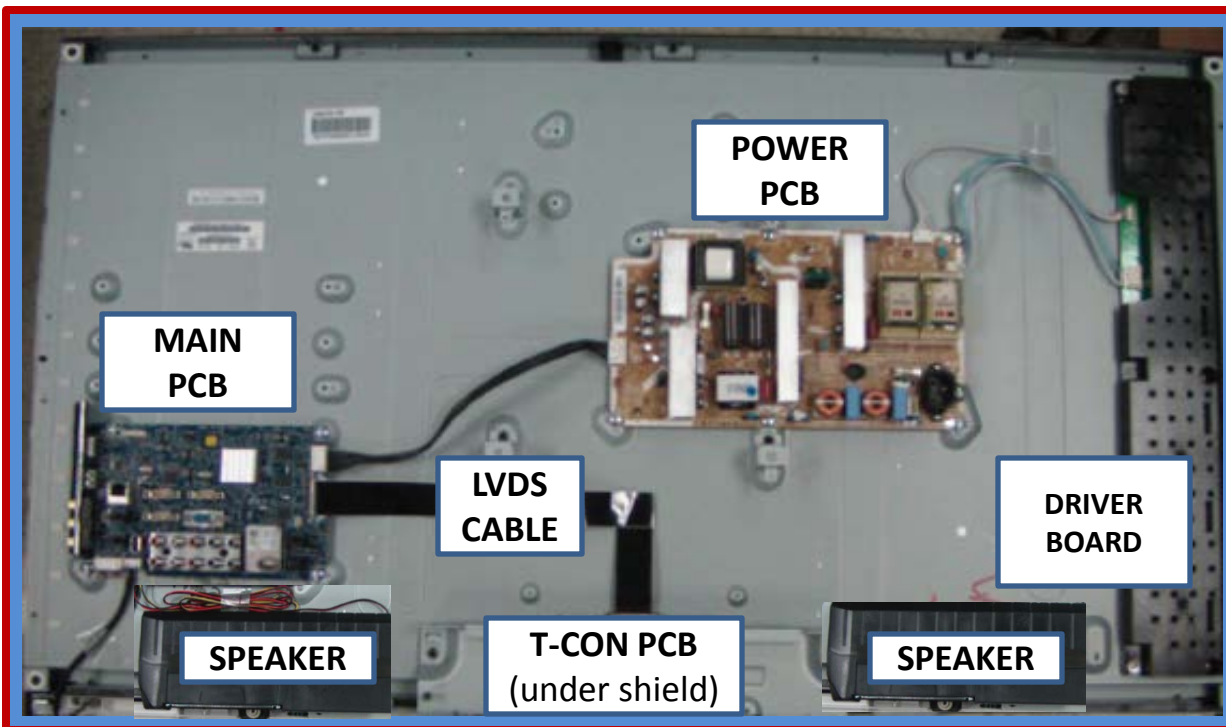




## SERVICE BULLETINS

### 2010 LCD Option Byte Table

Verify All Parts Numbers Are Current

| Version | Parts No                    | Short Description              |
|---------|-----------------------------|--------------------------------|
| ALL     | <a href="#">BN44-00341A</a> | Power PCB<br>Function & IR PCB |
| ALL     | <a href="#">BN96-13451B</a> |                                |
| ALL     | <a href="#">BN96-15663A</a> | Main PCB                       |
| ALL     | <a href="#">BN07-00830A</a> | Panel                          |
| ALL     | <a href="#">BN81-04411A</a> | T-CON PCB                      |
| ALL     | <a href="#">BN96-10689A</a> | Stand Guide Neck               |
| ALL     | <a href="#">BN96-12767E</a> | Rear Cover                     |
| ALL     | <a href="#">BN96-12808A</a> | Front Cover                    |
| ALL     | <a href="#">BN96-12795C</a> | Stand Guide                    |
| ALL     | <a href="#">BN96-12762A</a> | Stand Base                     |
| ALL     | <a href="#">BN40-00163A</a> | Tuner                          |
| ALL     | <a href="#">BN96-12837A</a> | Speaker                        |
| ALL     | <a href="#">BN96-13171U</a> | LVDS Cable                     |
| ALL     | <a href="#">3903-000467</a> | Power Cord                     |
| ALL     | <a href="#">BN59-01041A</a> | Remote                         |
| ALL     | <a href="#">BN63-01798B</a> | Cleaning Cloth                 |

**HELP** : 1-888-751-4086; 1-866-894-0637 (FE)

GSPN

<http://gspn3.samsungcsportal.com>

PLUS ONE

<http://my.plus1solutions.net/clientPortals/samsung>

## HOT TIPS

**Power On Problems:** (see page 2)

**Video Problems:** (see pages 3,4)

**TIP:** After replacing Main/Panel picture is upside down.

**Fix:** Test Mode/Mirror Option/Toggle

## FIRMWARE

10/18/2010

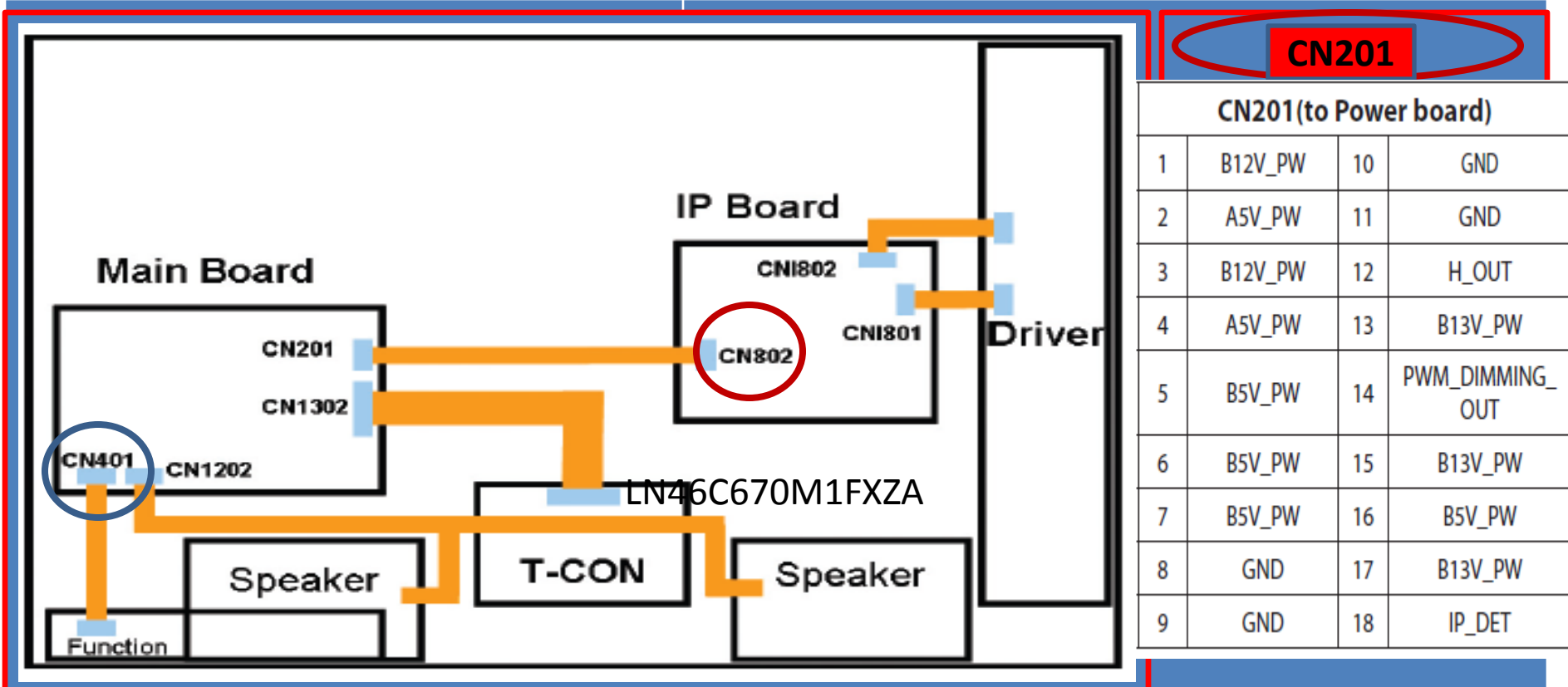
Firmware for SX1 & X4 Model

-. Version : 1016.3 (SX1), 2006.0 (X4)

-. Folder Name: T-TDT5AUSC / T-MSX5AUSC

This firmware will prevent below problems

- . Distorted picture on 70 Hz, 75 Hz
- . Distorted picture on DTV PIP with 1080i mode



### Power On Sequence (approximate Voltages)

1. Standby Voltages: CN201-4 (5V)
2. Power On CN201-2 (0 – 3V )
3. Low Voltage Supplies On CN201-1,3,5,7,13,15,17 (Volts Listed on CN802)
4. Back Light On CN201-16 (0-3V, delayed)
5. Back Light Confirm CNI802- (FB1 & FB2)
6. Dimming Signal CN201-14 (1V–4V approx)

### To Force Backlight On without Main Board :

1. Remove Power Cord
2. Remove CN802
3. Plug Power Cord In.
4. Backlight should be on immediately.

### CN401 (to Function/IR)

|   |          |    |            |
|---|----------|----|------------|
| 1 | IR       | 6  | KEY_INPUT1 |
| 2 | GND      | 7  | KEY_INPUT2 |
| 3 | A3.3V_PW | 8  | LED_STB    |
| 4 | MSCL_A5V | 9  | LED_CNTR   |
| 5 | MSDA_A5V | 10 | A3.3V_PW   |

## TROUBLESHOOTING VIDEO PROBLEMS

### 1. Verify Video Operation

- Customer Picture Test** (models available)
- "Display"** (If display is OK source is suspected)
- Substitute with known good Source  
(external DVD or Signal Generator)

### 2. Using Test Patterns in Service Mode

– **ENTER SERVICE MODE** –

- Select an active source signal. (HDMI preferred)  
Test Pattern may rely on signal source to appear.

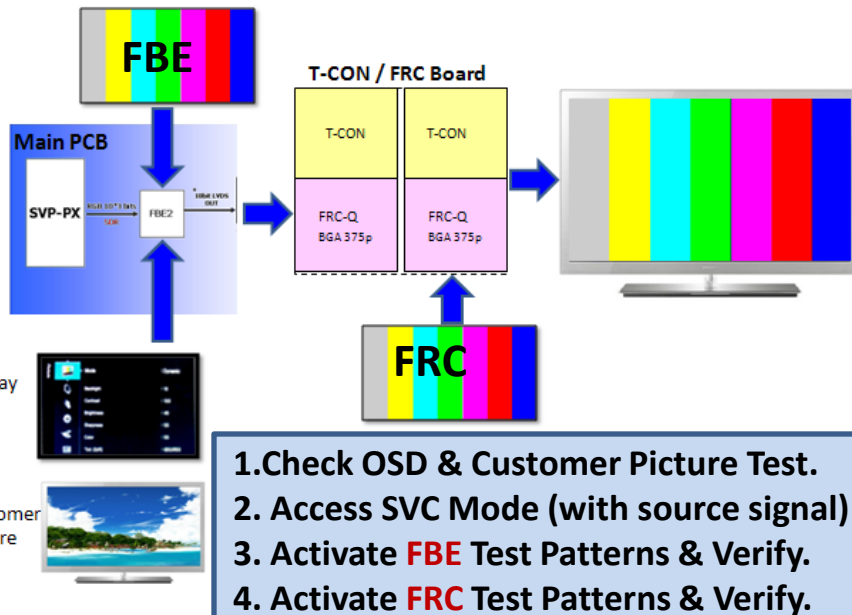
**Customer Remote**

- Power off
- Mute, 182, Power

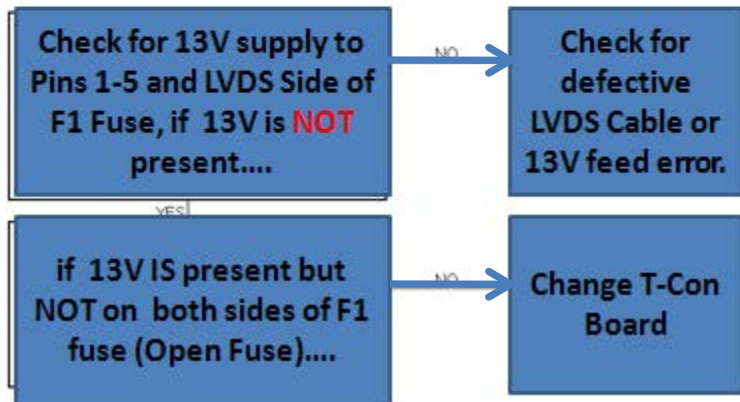
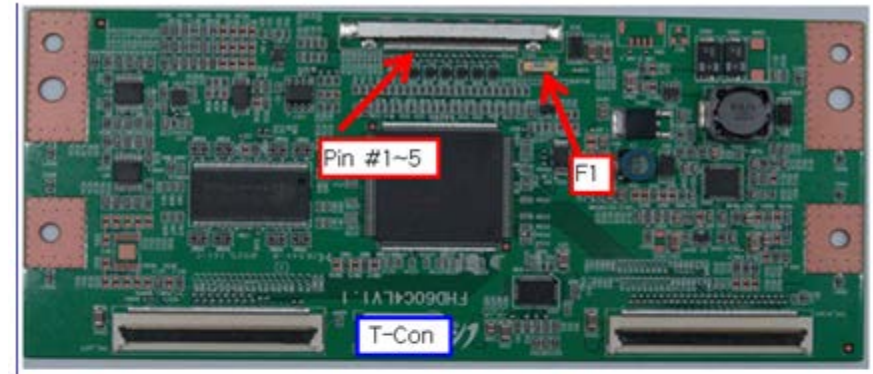
**Service Remote**

- Power On
- Info, Factory

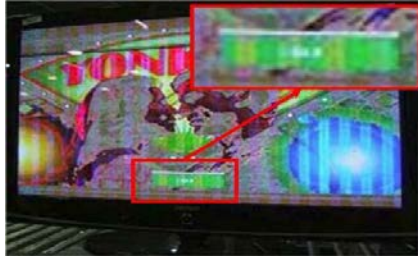
## 2010 Models with FRC 120Hz/240Hz LCD Signal Path for Troubleshooting



## T-Con Troubleshooting



## ON SCREEN FAILURE EXAMPLES:



If Picture & Display errors  
Defective Main Board, LVDS,  
or T-CON



Green lines or a green screen  
defective main board , LVDS , or  
T-CON.

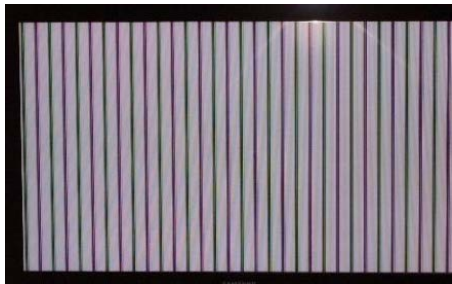


Original Image



Image on Screen

Pixelization can be caused by the main board  
but is more commonly a source error



Vertical or Horizontal Lines :Defective  
Panel likely but also T-CON, LVDS, or Main  
Board. Use Test Patterns in Factory Service  
Mode to determine error)

## ALIGNMENTS:

### 1. Check/Set Option Bytes:

#### Using the Customer Remote

1. Turn the power off and set to stand-by mode
2. Press the remote buttons in this order; POWER OFF-MUTE-1-8-2-POWER ON to turn the set on.
3. The set turns on and enters service mode. This may take approximately 20 seconds.
4. Press the Power button to exit and store data in memory.  
- If you fail to enter service mode, repeat steps 1 and 2 above.
5. Initial SERVICE MODE DISPLAY State

| Project    | PB5G            | PB5G          | PB5G          |
|------------|-----------------|---------------|---------------|
| Model      | B550            | B550          | B550          |
| Model Code | PN6B550T2FXZA   | PN6B550T2FXZA | PN6B550T2FXZA |
| No.        | ITEMS           |               |               |
| 1          | Factory Reset   | -             | -             |
| 2          | Type            | 50FSpl4       | 58FNK1        |
| 3          | Model           | PB550         | PB550         |
| 4          | TUNER           | ALPS          | ALPS          |
| 5          | Region          | US            | US            |
| 6          | DDR             | SAMSUNG       | SAMSUNG       |
| 7          | Light Effect    | Off           | Off           |
| 8          | Inch            | 50"           | 55"           |
| 9          | Exhibition Mode | Off           | Off           |

Option Bytes

| Factory Reset   |         |
|-----------------|---------|
| Type            | 50FSpl4 |
| Model           | PB550   |
| TUNER           | ALPS    |
| Region          | US      |
| DDR             | SAMSUNG |
| Light Effect    | Off     |
| Inch            | 50"     |
| Exhibition Mode | Off     |

| Model Code     | Front Color |          |       |       |        |            |
|----------------|-------------|----------|-------|-------|--------|------------|
|                |             | Type     | Model | Tuner | Region | Side Label |
| LN40C550J1FXZA | T-R-BLK     | 40L6AF0C | LC550 | Semco | US     | AA09       |

**2. Check/Perform Firmware Upgrade for all repairs.**

**3. Perform reset in Service Mode & Plug and Play if Main board is replaced.**

## SPECIAL NOTES:

Inform customer of reset of all  
Settings if Main Board or Panel is replaced.